

10602752

=> d his

(FILE 'HOME' ENTERED AT 14:33:16 ON 25 MAR 2004)

FILE 'CAPLUS' ENTERED AT 14:33:30 ON 25 MAR 2004

FILE 'REGISTRY' ENTERED AT 14:33:33 ON 25 MAR 2004

L1 STRUCTURE UPLOADED

L2 0 S L1

L3 10 S L1 SSS FULL

FILE 'CAPLUS' ENTERED AT 14:34:41 ON 25 MAR 2004

L4 3 S L3

FILE 'MARPAT' ENTERED AT 14:35:27 ON 25 MAR 2004

L5 0 S L3

L6 4 S L3 SSS FULL

FILE 'CAPLUS' ENTERED AT 14:37:57 ON 25 MAR 2004

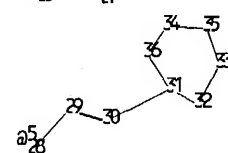
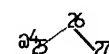
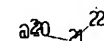
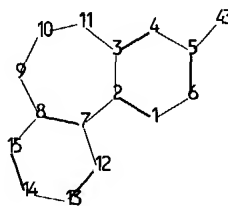
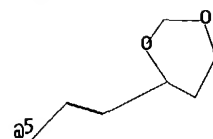
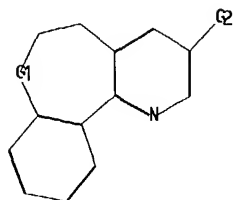
L7 2 S L6 NOT L4

FILE 'BEILSTEIN' ENTERED AT 14:38:44 ON 25 MAR 2004

L8 0 S L1

L9 0 S L1 SSS FULL

=>



chain nodes :

17 18 19 20 21 22 23 24 25 26 27 28 29 30 43

ring nodes :

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 31 32 33 34 35 36

chain bonds :

5-43 17-18 17-19 20-21 21-22 23-24 25-26 26-27 28-29 29-30 30-31

ring bonds :

1-2 1-6 2-3 2-7 3-4 3-11 4-5 5-6 7-8 7-12 8-9 8-15 9-10 10-11 12-13 13-14  
14-15 31-32 31-36 32-33 33-35 34-35 34-36

exact/norm bonds :

2-7 3-11 5-43 8-9 9-10 10-11 17-18 17-19 20-21 21-22 23-24 25-26 26-27 28-29  
29-30 30-31 31-32 31-36 32-33 33-35 34-35 34-36

normalized bonds :

1-2 1-6 2-3 3-4 4-5 5-6 7-8 7-12 8-15 12-13 13-14 14-15

G1:O,S,N

G2:[\*1],[\*2],[\*3],[\*4],[\*5]

Match level :

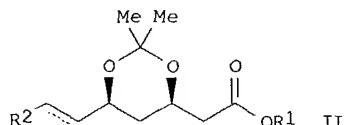
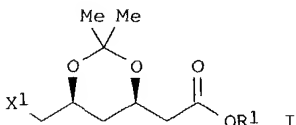
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:Atom  
12:Atom 13:Atom 14:Atom 15:Atom 17:CLASS 18:CLASS 19:CLASS 20:CLASS 21:CLASS  
22:CLASS 23:CLASS 24:CLASS 25:CLASS 26:CLASS 27:CLASS 28:CLASS 29:CLASS 30:CLASS  
31:Atom 32:Atom 33:Atom 34:Atom 35:Atom 36:Atom 43:CLASS

10602752

=> d 1-3 bib abs hitstr

L4 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 2002:946266 CAPLUS  
 DN 138:24717  
 TI Process for preparing chiral diol sulfones and dihydroxy acid HMG CoA reductase inhibitors  
 IN Brodfuehrer, Paul R.; Sattelberg, Thomas R., Sr.; Kant, Joydeep; Qian, Xinhua  
 PA Bristol-Myers Squibb Company, USA  
 SO PCT Int. Appl., 84 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002098854	A2	20021212	WO 2002-US17269	20020530
	WO 2002098854	A3	20030327		
	W:		AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM		
	RW:		GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG		
	US 2003018199	A1	20030123	US 2002-158355	20020530
	EP 1392656	A2	20040303	EP 2002-737324	20020530
	R:		AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR		
PRAI	US 2001-296403P	P	20010606		
	WO 2002-US17269	W	20020530		
OS	MARPAT 138:24717				
GI					



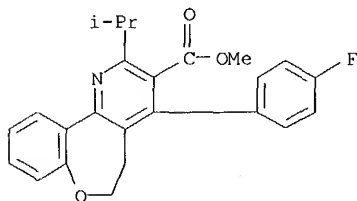
AB Title Compds. I and II [X1 = F3CSO3, MeSO3, 4-MeC6H4SO3, RS, RSO2; R = (un)substituted tetrazolyl, Ph, 2-benzoxazolyl, 2-benzothiazolyl; R1 = alkyl, cycloalkyl, aralkyl, Cbz; R2 = substituted tetrahydronaphthyl, pyrrolyl, pyrimidinyl, pyridinyl] were prepared as intermediates for HMG CoA inhibitors. Thus, the diol III was prepared as its arginine salt from the benzocycloheptapyridinecarboxaldehyde and the sulfone I [X1 = 1-phenyl-5-tetrazolylsulfonate, R1 = CMe3], both of which were prepared in several steps.

IT 380460-35-5

RL: RCT (Reactant); RACT (Reactant or reagent)  
 (process for preparing chiral diol sulfones and dihydroxy acid HMG CoA reductase inhibitors)

RN 380460-35-5 CAPLUS

CN [1]Benzoxepino[5,4-b]pyridine-3-carboxylic acid, 4-(4-fluorophenyl)-5,6-dihydro-2-(1-methylethyl)-, methyl ester (9CI) (CA INDEX NAME)



L4 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 2002:540258 CAPLUS  
 DN 137:109267  
 TI Preparation of benzoxepinopyridines as HMG-CoA reductase inhibitors  
 IN Robl, Jeffrey A.; Chen, Bang-chi; Sun, Chong-qing  
 PA USA  
 SO U.S. Pat. Appl. Publ., 42 pp., Cont.-in-part of U.S. Ser. No. 875,155.  
 CODEN: USXXCO  
 DT Patent  
 LA English  
 FAN.CNT 2

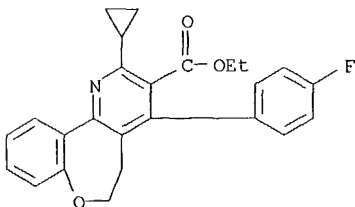
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2002094977	A1	20020718	US 2001-7407	20011204
	US 6627636	B2	20030930		
	US 2002013334	A1	20020131	US 2001-875155	20010606
PRAI	US 2000-211595P	P	20000615		
	US 2001-875155	A2	20010606		
OS	MARPAT 137:109267				
GI					

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB Title compds. I [X = O, S, SO, SO<sub>2</sub>, NR<sub>7</sub>; Z = HOCHCH<sub>2</sub>CH(OH)CH<sub>2</sub>CO<sub>2</sub>R<sub>3</sub>, 4-hydroxy-2-oxopyran-6-yl, etc.; n = 0, 1; R<sub>1</sub>, R<sub>2</sub> = alkyl, arylalkyl, cycloalkyl, alkenyl, cycloalkenyl, aryl, heteroaryl, cycloheteroalkyl; R<sub>3</sub> = H, alkyl, metal ion; R<sub>4</sub> = H, halo, CF<sub>3</sub>, etc.; R<sub>7</sub> = H, alkyl, aryl, alkanoyl, aroyl, alkoxycarbonyl, etc.; R<sub>9</sub>, R<sub>10</sub> = H, alkyl], were prepared as HMG CoA reductase inhibitors active in inhibiting cholesterol biosynthesis, modulating blood serum lipids such as lowering LDL cholesterol and/or increasing HDL cholesterol, and treating hyperlipidemia, hypercholesterolemia, hypertriglyceridemia and atherosclerosis (no data). A multistep synthesis of II is reported.

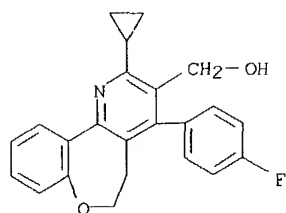
IT 380460-00-4P 380460-02-6P 380460-04-8P  
 380460-06-0P 380460-13-9P 380460-17-3P  
 380460-19-5P 380460-21-9P 380460-23-1P  
 380460-35-5P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (preparation of benzoxepinopyridines as HMG-CoA reductase inhibitors for treatment of hyperlipidemia, hypercholesterolemia, hypertriglyceridemia, atherosclerosis, and other disorders)

RN 380460-00-4 CAPLUS  
 CN [1]Benzoxepino[5,4-b]pyridine-3-carboxylic acid, 2-cyclopropyl-4-(4-fluorophenyl)-5,6-dihydro-, ethyl ester (9CI) (CA INDEX NAME)



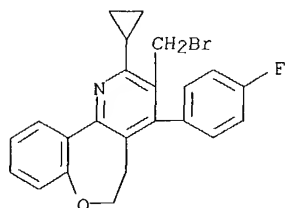
RN 380460-02-6 CAPLUS  
 CN [1]Benzoxepino[5,4-b]pyridine-3-methanol, 2-cyclopropyl-4-(4-fluorophenyl)-5,6-dihydro- (9CI) (CA INDEX NAME)

10602752



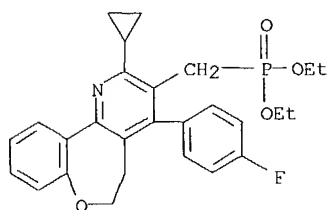
RN 380460-04-8 CAPLUS

CN [1]Benzoxepino[5,4-b]pyridine, 3-(bromomethyl)-2-cyclopropyl-4-(4-fluorophenyl)-5,6-dihydro- (9CI) (CA INDEX NAME)



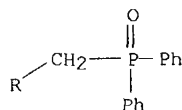
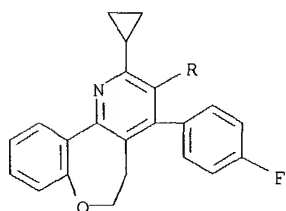
RN 380460-06-0 CAPLUS

CN Phosphonic acid, [[2-cyclopropyl-4-(4-fluorophenyl)-5,6-dihydro[1]benzoxepino[5,4-b]pyridin-3-yl]methyl]-, diethyl ester (9CI) (CA INDEX NAME)



RN 380460-13-9 CAPLUS

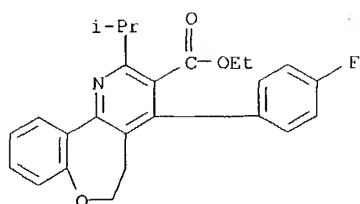
CN [1]Benzoxepino[5,4-b]pyridine, 2-cyclopropyl-3-[[diethylphosphoryl]methyl]-4-(4-fluorophenyl)-5,6-dihydro- (9CI) (CA INDEX NAME)



RN 380460-17-3 CAPLUS

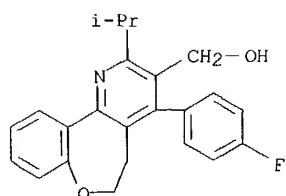
CN [1]Benzoxepino[5,4-b]pyridine-3-carboxylic acid, 4-(4-fluorophenyl)-5,6-dihydro-2-(1-methylethyl)-, ethyl ester (9CI) (CA INDEX NAME)

10602752



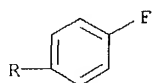
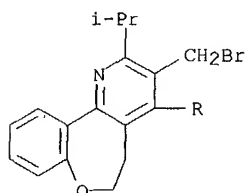
RN 380460-19-5 CAPLUS

CN [1]Benzoxepino[5,4-b]pyridine-3-methanol, 4-(4-fluorophenyl)-5,6-dihydro-2-(1-methylethyl)- (9CI) (CA INDEX NAME)



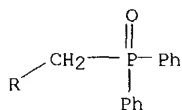
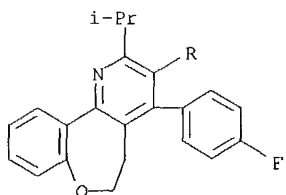
RN 380460-21-9 CAPLUS

CN [1]Benzoxepino[5,4-b]pyridine, 3-(bromomethyl)-4-(4-fluorophenyl)-5,6-dihydro-2-(1-methylethyl)- (9CI) (CA INDEX NAME)



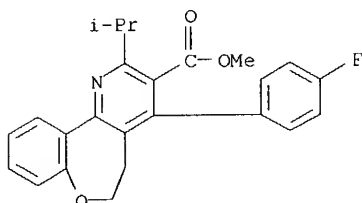
RN 380460-23-1 CAPLUS

CN [1]Benzoxepino[5,4-b]pyridine, 3-[(diphenylphosphinyl)methyl]-4-(4-fluorophenyl)-5,6-dihydro-2-(1-methylethyl)- (9CI) (CA INDEX NAME)



10602752

RN 380460-35-5 CAPLUS  
 CN [1]Benzoxepino[5,4-b]pyridine-3-carboxylic acid, 4-(4-fluorophenyl)-5,6-dihydro-2-(1-methylethyl)-, methyl ester (9CI) (CA INDEX NAME)



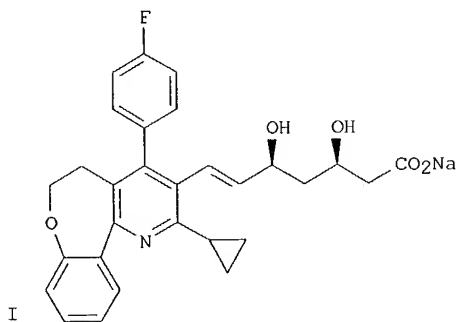
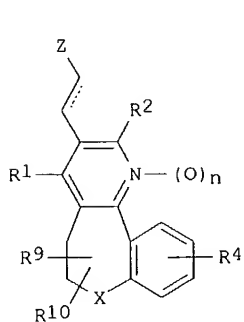
L4 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 2001:923807 CAPLUS  
 DN 136:37587  
 TI Preparation of fused pyridine derivatives as HMG-CoA reductase inhibitors  
 IN Robl, Jeffrey A.; Chen, Bang-Chi; Sun, Chong-Qing  
 PA Bristol-Myers Squibb Company, USA  
 SO PCT Int. Appl., 106 pp.  
 CODEN: PIXXD2

DT Patent  
 LA English

FAN.CNT 2

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001096347	A1	20011220	WO 2001-US18864	20010612
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP 1294728	A1	20030326	EP 2001-944447	20010612
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
JP 2004503557	T2	20040205	JP 2002-510488	20010612
NO 2002006012	A	20030203	NO 2002-6012	20021213
US 2000-211595P	P	20000615		
WO 2001-US18864	W	20010612		
MARPAT 136:37587				

*this appl.*



AB The title compds. I [X = O, S; Z = HOCHCH2CH(OH)CH2CO2R3, 4-hydroxy-2-oxopyran-6-yl; n = 0, 1; R1 and R2 are the same or different and are independently selected from alkyl, arylalkyl, cycloalkyl, alkenyl,

cycloalkenyl, aryl, heteroaryl or cycloheteroalkyl; R3 = H, alkyl; R4 = H, halo, CF3, etc.; R9, R10 = H, alkyl], HMG CoA reductase inhibitors and active in inhibiting cholesterol biosynthesis, modulating blood serum lipids such as lowering LDL cholesterol and/or increasing HDL cholesterol, and treating hyperlipidemia, hypercholesterolemia, hypertriglyceridemia and atherosclerosis, were prepared E.g., a multistep synthesis of II is reported.

IT 380460-00-4P 380460-02-6P 380460-04-8P

380460-06-0P 380460-13-9P 380460-17-3P

380460-19-5P 380460-21-9P 380460-23-1P

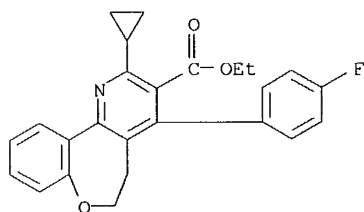
380460-35-5P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of fused pyridine derivs. as HMG-CoA reductase inhibitors)

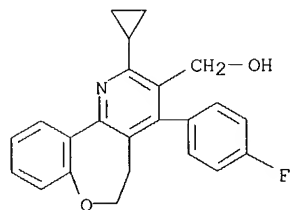
RN 380460-00-4 CAPLUS

CN [1]Benzoxepino[5,4-b]pyridine-3-carboxylic acid, 2-cyclopropyl-4-(4-fluorophenyl)-5,6-dihydro-, ethyl ester (9CI) (CA INDEX NAME)



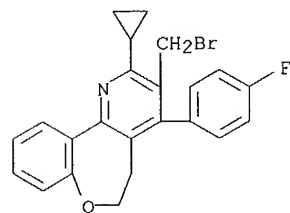
RN 380460-02-6 CAPLUS

CN [1]Benzoxepino[5,4-b]pyridine-3-methanol, 2-cyclopropyl-4-(4-fluorophenyl)-5,6-dihydro- (9CI) (CA INDEX NAME)



RN 380460-04-8 CAPLUS

CN [1]Benzoxepino[5,4-b]pyridine, 3-(bromomethyl)-2-cyclopropyl-4-(4-fluorophenyl)-5,6-dihydro- (9CI) (CA INDEX NAME)

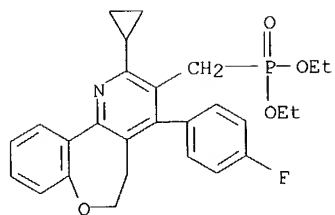


RN 380460-06-0 CAPLUS

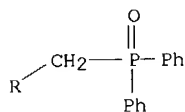
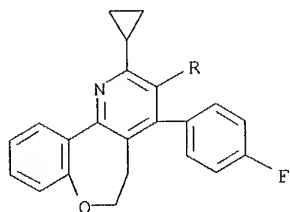
CN Phosphonic acid, [[2-cyclopropyl-4-(4-fluorophenyl)-5,6-dihydro[1]benzoxepino[5,4-b]pyridin-3-yl]methyl]-, diethyl ester (9CI) (CA INDEX NAME)



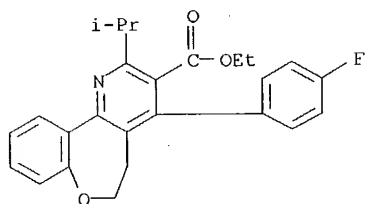
10602752



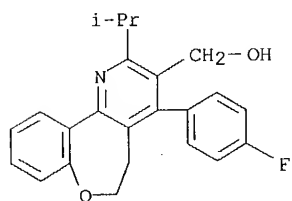
RN 380460-13-9 CAPLUS  
 CN [1]Benzoxepino[5,4-b]pyridine, 2-cyclopropyl-3-  
 [(diphenylphosphinyl)methyl]-4-(4-fluorophenyl)-5,6-dihydro- (9CI) (CA  
 INDEX NAME)



RN 380460-17-3 CAPLUS  
 CN [1]Benzoxepino[5,4-b]pyridine-3-carboxylic acid, 4-(4-fluorophenyl)-5,6-  
 dihydro-2-(1-methylethyl)-, ethyl ester (9CI) (CA INDEX NAME)

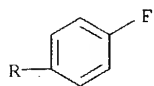
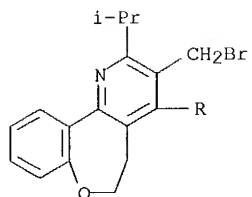


RN 380460-19-5 CAPLUS  
 CN [1]Benzoxepino[5,4-b]pyridine-3-methanol, 4-(4-fluorophenyl)-5,6-dihydro-2-  
 (1-methylethyl)- (9CI) (CA INDEX NAME)

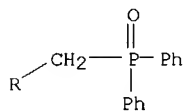
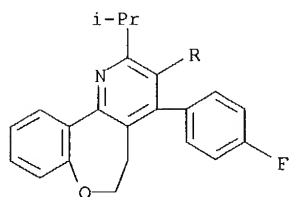


RN 380460-21-9 CAPLUS  
 CN [1]Benzoxepino[5,4-b]pyridine, 3-(bromomethyl)-4-(4-fluorophenyl)-5,6-  
 dihydro-2-(1-methylethyl)- (9CI) (CA INDEX NAME)

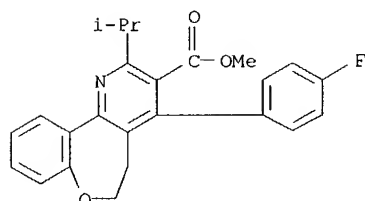
10602752



RN 380460-23-1 CAPLUS  
CN [1]Benzoxepino[5,4-b]pyridine, 3-[(diphenylphosphinyl)methyl]-4-(4-fluorophenyl)-5,6-dihydro-2-(1-methylethyl)- (9CI) (CA INDEX NAME)



RN 380460-35-5 CAPLUS  
CN [1]Benzoxepino[5,4-b]pyridine-3-carboxylic acid, 4-(4-fluorophenyl)-5,6-dihydro-2-(1-methylethyl)-, methyl ester (9CI) (CA INDEX NAME)



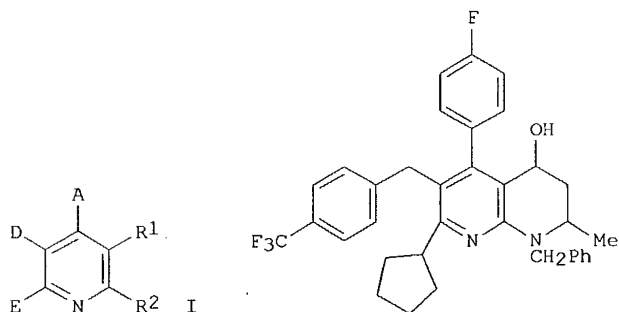
RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

10602752

=> d 1-2 bib abs

L7 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1998:55686 CAPLUS  
 DN **128:128005**  
 TI Preparation of condensed pyridines for treatment of hyperlipoproteinemia and arteriosclerosis.  
 IN Schmeck, Carsten; Mueller-Gliemann, Matthias; Schmidt, Gunter; Brandes, Arndt; Angerbauer, Rolf; Loegers, Michael; Bremm, Klaus-Dieter; Bischoff, Hilmar; Schmidt, Delf; Schuhmacher, Joachim  
 PA Bayer A.-G., Germany  
 SO Ger. Offen., 44 pp.  
 CODEN: GWXXBX  
 DT Patent  
 LA German  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 19627431	A1	19980115	DE 1996-19627431	19960708
	EP 818197	A1	19980114	EP 1997-110361	19970625
	EP 818197	B1	20031112		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	AT 253911	E	20031115	AT 1997-110361	19970625
	US 5932587	A	19990803	US 1997-883673	19970627
	JP 10167967	A2	19980623	JP 1997-192014	19970703
	AU 715101	B2	20000113	AU 1997-28449	19970703
	AU 9728449	A1	19980115		
	CA 2209825	AA	19980108	CA 1997-2209825	19970704
	TW 382631	B	20000221	TW 1997-86109414	19970704
	IL 121234	A1	20001206	IL 1997-121234	19970704
	NO 9703143	A	19980109	NO 1997-3143	19970707
	ZA 9706020	A	19980202	ZA 1997-6020	19970707
	CN 1174196	A	19980225	CN 1997-114562	19970708
	BR 9703890	A	19981103	BR 1997-3890	19970708
PRAI	DE 1996-19627431	A	19960708		
	DE 1996-19627432	A	19960708		
OS	MARPAT 128:128005				
GI					



AB Title compds. (I; A = (substituted) aryl; D = R5X, R6R7R8C; R5, R6 = cycloalkyl, (substituted) aryl, benzocondensed heterocyclyl; R7 = H, halo; R8 = H, halo, N3, CF3, OH, OCF3, alkoxy, amino; E = cycloalkyl, alkyl, cycloalkylalkyl, hydroxyalkyl; R7R8 = O; R1R2 = (substituted) alkylene interrupted by O, S, SO2, imino], were prepared Thus, title compound (II) at 2+3 mg/kg orally in hamsters increased HDL levels by 9.21%.

L7 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2004 ACS on STN  
 AN 1990:478409 CAPLUS  
 DN **113:78409**  
 TI (Morpholinocarbonyl)benzothiophenes and analogs as agrochemical fungicides and their preparation  
 IN Pepin, Regis; Schmitz, Christian; Lacroix, Guy Bernard; Dellis, Philippe; Veyrat, Christine  
 PA Rhone-Poulenc Agrochimie, Fr.

SO Eur. Pat. Appl., 75 pp.

CODEN: EPXXDW

DT Patent

LA French

FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 360701	A1	19900328	EP 1989-420320	19890831
	R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE				
	FR 2635776	A1	19900302	FR 1988-11665	19880901
	FR 2635776	B1	19930611		
	FR 2648459	A1	19901221	FR 1989-5774	19890425
	FR 2648459	B1	19940527		
	FR 2649107	A1	19910104	FR 1989-9150	19890703
	FR 2649107	B1	19940819		
	FR 2649699	A1	19910118	FR 1989-9742	19890713
	HU 207931	B	19930728	HU 1989-4523	19890831
PRAI	FR 1988-11665		19880901		
	FR 1989-5774		19890425		
	FR 1989-9150		19890703		
	FR 1989-9742		19890713		

OS CASREACT 113:78409; MARPAT 113:78409

GI For diagram(s), see printed CA Issue.

AB The title compds. I [ring A is a (substituted) C or heterocyclic ring containing  $\geq 1$  unsatd. bond, such as ethylene or aromatic; Y = O, S; Z = NR1R2; R1, R2 = (substituted) alkyl, alkoxy, C3-7 cycloalkyl, alkenyl, C3-7 alkynyl; or NR1R2 = (un)saturated (substituted) heterocyclyl; R3-R5 = H, halo, (substituted) amino, (substituted) alkyl, alkoxy, etc.; R3 and R4 (in meta and para positions) together may form a single radical containing 1 or 2 O atoms] were prepared. A mixture of benzothiophene II (R = NH2) and NaNO2 in H2O containing H2SO4 was stirred for 1 h and then mixed with aqueous KI. The resulting mixture was heated at 60° for 1 h to give II (R = iodo). At 1000 ppm, 69 compds. I [e.g. II (R = NO2)] gave 80% inhibition of *Phytophthora infestans*.